Potential, Challenges and Future Directions of Machine Learning for the Diagnosis of COVID-19

COVID-19 is a global pandemic that continues to spread around the world with over 200 million confirmed cases and over 4 million deaths across 200 countries. Shortly after the onset of the disease there have been considerable effort in developing AI algorithms that could assist with diagnosis and management of the disease. I will first give an overview of the existing research in this area and present our research work using in Liverpool the HPC cluster in partnership with Alces Flight and AWS. Then I will highlight the potentials and challenges revealed by the current research. Finally, I will provide some insights into future directions towards introducing machines learning models for the Diagnosis of COVID-19 into clinical practice.